Chilblain lesions after COVID-19 mRNA vaccine

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Dear Editor, A 42-year-old man developed nonpainful erythematous-to-purplish patches located on his distal phalanges and nail beds (Figure) after the first dose of the anti-COVID-19 vaccine (+ 12 days, Pfizer-BioNTech COVID-19, BNT162b2) along with an acrocyanosis of the hands. Although negative antibodies do not preclude a previous exposure to the virus, blood and swab tests were negative for COVID-19 infection and thrombophilic/autoimmune conditions. After the second jab (+ 21 days) no worsening of the lesions or other onset of symptoms were observed. A diagnosis of possible severe adverse event due to vaccine administration was made.[1] Chilblain lesions have been described in patients with COVID-19 and may be due to an abnormal inflammatory response. Although not reported in clinical trials,[2] vaccination may have promoted an immunological reaction leading to vascular swelling and perniosis similar to what has been observed after COVID-19 infection.

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References

1 Naranjo CA, Busto U, Sellers EM *et al.* A method for estimating the probability of adverse drug reactions. *Clin Pharmacol Ther* 1981; **30**:239–45.
2 Polack FP, Thomas SJ, Kitchin N *et al.* Safety and efficacy of the BNT162b2 mRNA Covid-19 vaccine. *N Engl J Med* 2020; **383**:2603–15.

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